These funds have promoted the establishment of agencies of various kinds that have in turn been chiefly instrumental in gradually bringing tuberculosis under control. These lines of defense may be catalogued briefly thus:

1. Twelve hundred institutions—sanatoria for tuberculosis and hospitals having tuberculosis departments—providing 95,000 beds for the treatment and prevention of tuberculosis, chiefly for adults.

2. Ten thousand public health nurses engaged in tuberculosis work.

3. One thousand clinics for diagnosing and finding tuberculosis.

4. More than 1,200 preventoria, summer camps, open-air schools and similar institutions for the care and treatment of children with various forms of tuberculosis or for those who have been in contact with tuberculosis, or who are subnormal physically.

5. One thousand nine hundred and eighty-one tuberculosis associations, including a state-wide organization in every state and local agencies in all of the larger population centers.

But the building of our national defense against tuberculosis is not completed. The disease still takes the lives of about 70,000 persons annually in the United States. Tuberculosis, although ranking seventh as a cause of death when all ages are considered, is the leading killer of people between 15 and 45. It remains the breaker of homes, the maker of orphans, and a constant threat to the life and happiness of everyone.

Hotis Test Is New Weapon Against Dairy Cow Disease.—A new test which promises to be a useful means of detecting mastitis, a troublesome and costly disease of dairy cattle, has been developed by research workers of the United States Department of Agriculture. The new method is known as the "Hotis test," named after its originator, R. P. Hotis of the Bureau of Dairy Industry, who died soon after conducting most of the experimental work.

Although the method has been applied only on a limited basis thus far, Department officials plan to give it practical field tests to determine its adaptability under various conditions, for the diagnosis of mastitis in dairy herds. A simple accurate test for the detecton of this disease in its early and latent stages has long been sought.

Mastitis, especially in dairy cows, has been a problem for many years. It is a disease of the milk glands which often results in abnormal milk and changes in the udder tissue in the animals infected. Large numbers of cows have been slaughtered because their udders have been so badly damaged as to make them unfit for milk production.

The trained veterinarian or inspector can often detect this disease by clinical symptoms that are apparent to the eye, or by careful examination with the hands. But there are certain early and latent stages in which the udder may be infected with the causative organisms, and yet a definite diagnosis may be difficult or impossible under usual methods.

A number of laboratory tests have been used to indicate such abnormal milk. Such tests include the direct microscopic examination, leukocyte count, chlorid test, brom-thymol-blue test, catalase test, and bacteriologic culture methods on certain differential media. Usually two or more of these tests have been used together, as one test may show a reaction where others fail.

The new test brought out by the Bureau of Dairy Industry is believed to be more accurate than any other heretofore used. In addition, it is comparatively simple and requires little equipment, thus allowing the handling of a large number of samples at one time.

By the use of this test it appears that incipient or latent infections with the mastitis streptococcus may be quickly detected. This will allow segregation of the infected animals and permit prompt methods to prevent spreading. Infected cows should be milked last, and the milker should rinse his hands in a chlorin solution after milking each cow. If milking machines are used, the teat cups should be rinsed thoroughly with water, then with a chlorin solution, before they are placed on the next animal.

LETTERS

Concerning automobile injuries.

WESTWAYS*

November 2, 1936.

To the Editor:—I thank you for sending me the copy of CALIFORNIA AND WESTERN MEDICINE.

I think I need not tell you that none is more aware of the deplorable accident situation in the United States today than the Automobile Club of Southern California. We have studied the problem for many years and have considered it from every possible angle. The point of view that there are entirely too many incompetent drivers operating motor vehicles today is probably the most generally accepted reason for the high casualty rate. How to eliminate these unfits is a problem that, from its practical aspects, is a most difficult one.

The existing law requiring physical examinations has many glaring defects. Were it to be rigidly and impartially enforced it would still fall far short of proving a noteworthy correctional measure. This is because of the fact that it makes no provision for testing the psychological as opposed to the physiological qualifications of the driver. There are many of us who believe that the mentally unfit (temporarily or otherwise) are probably responsible for more accidents than the physically unfit. In the class of the mentally unfit will be found the "repeater," who is the cause of accident after accident. He may be of the emotionally unbalanced type, a victim of delusions or a sufferer from any one of many neurological ailments which prevent rapid reactions in times of emergency. The present law doesn't touch this type of individual, and yet we all know that he is a distinct menace to himself and to his fellow motorists. When we have devised a means for determining those who are congenitally disposed toward accidents and can take them out from behind the wheels of motor vehicles, we shall have gone a long way toward solving the accident problem.

I noted with interest your relative figures as to the geographical accident localities. Without being captious I think the per capita method of rating accidents is hardly fair. We have practically abandoned it, for we feel that gasoline consumption is a more equitable gauge for measuring the relative hazards in various areas. And there is considerable difference between two scales of measurement. On the basis of gasoline consumption, for instance, we find that the national average death rate in 1935 was 22.8 deaths per 10,000,000 gallons of gasoline consumed. The lowest rate prevailed in Rhode Island, where it dropped to 10.2; the highest in Georgia, where it reached 35.4. By this basis of calculation the California figure was 20.9—not an enviable record by any manner of means, but yet somewhat below the national average. Unfortunately we do not have these figures for various cities. It would be interesting to compare them with the per capita death rate.

Again I want to thank you for sending me your publication, which has proven of great interest to me.

Very sincerely yours,

PHIL TOWNSEND HANNA,
Editor and General Manager.

Concerning legal jurisdiction of district coroners.

STATE OF CALIFORNIA
LEGAL DEPARTMENT

San Francisco, October 23, 1936.

Honorable Walter M. Dickie,
Director of Public Health,
313 State Building,
San Francisco.

Dear Sir:—In your communication of September 17, 1936, you state that a seaman died aboard the steamer *S. C. T. Dodd* as it was being untied from a pontoon wharf at Estero Bay, San Luis Obispo County, California.

* Owned and published monthly by the Automobile Club of Southern California.